

# RAND REVIEW

Spring 2007

Vol. 31, No. 1



## Keeping the Pacific

An American Response to China's Growing Military Might

—By Roger Cliff, Evan Medeiros, and Keith Crane

**Missing Link**  
Connection Found Between Government Health Insurance and Better Child Health

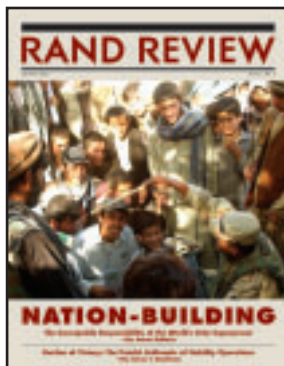
**Takeover Overtaken**  
Public Management of Philadelphia Schools Leaves Private Management Behind in Math

**Wouldn't It Be Lovely?**  
British Policy on Antisocial Behavior Can Take Cues from Studies Near and Far



# Get the Big Picture

*RAND Review* covers the big issues with an eye for the important details.



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## Message from the Editor

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### Downplayed Policies Rise Again

Three feature stories in this *RAND Review* highlight the advantages of policy options that have been demoted, disregarded, or doubted in recent years—in defense, education, and health, respectively. The good news is that the promise of these policy options has not diminished. If anything, their stock has risen.

While wars in Afghanistan and especially Iraq have strained the ability of U.S. forces to maintain their historically mandated levels of readiness for new contingencies, China has grown steadily stronger. In January, China destroyed an orbiting satellite with a ground-launched ballistic missile, the first successful use of antisatellite technology since a U.S. test in 1985. In March, China announced an 18 percent hike in military spending. As Roger Cliff and his colleagues advise in our cover story, China does not pose a direct threat to U.S. security, but China does pose a real and growing threat to Taiwan and thus to the U.S. ability to fulfill its security commitments to that self-governing island. To prepare for a contingency in the Western Pacific, the United States can do much more.

Since enactment of the federal No Child Left Behind Act of 2001, public school districts that fail to show dramatic increases in student achievement have been threatened with state takeover and privatization. Our Philadelphia story by Brian Gill shows that privatization is not the only solution. In Philadelphia, site of the nation's largest state takeover and privatization effort, both the privately and publicly managed public schools have improved. In fact, some of the publicly managed schools have outpaced all others. The implementation of private management was limited in this case, but reforming public education management has proved to be at least as effective as resorting to privatization.

Our story and centerpiece on the State Children's Health Insurance Program enumerate the benefits of a policy that has been widely implemented since 1997 but also widely doubted. Operating in all 50 states, this government-sponsored health insurance program has made health care more accessible to children in low-income families. Yet even after a decade, there is considerable skepticism that this program actually improves children's health. The story by Michael Seid proves the skeptics wrong. Seid confirms the correlation between realized access to care (or receiving needed care) among children enrolled in this program and clinically meaningful improvements in their health-related quality of life.

—John Godges

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### On the Cover

The Kitty Hawk, Ronald Reagan, and Abraham Lincoln aircraft carrier strike groups sail in formation, while U.S. Air Force, U.S. Navy, and U.S. Marine Corps aircraft fly overhead near Guam on June 18, 2006, during the largest U.S. military exercise in the Pacific since the Vietnam War.

AP IMAGES/U.S. NAVY, PHOTOGRAPHER'S MATE 3RD CLASS JAROD HODGE



### How the New Orleans Police Department Can Get Back on Its Feet

As a result of Hurricane Katrina and the flooding that followed, the New Orleans Police Department (NOPD) has suffered unusually high rates of departure from the force and an inability to recruit new officers. However, some low-cost initiatives can address these recruiting and retention problems, according to a new RAND study.

During the 14 months following the storm of August 2005, the budgeted force shrank 15 percent, and the actual force fell 18 percent. Even more problematic, the losses were concentrated among the junior ranks—the officers who patrol the streets and who are being groomed for future leadership.

Recognizing the city's budgetary constraints, researchers focused on (but were not limited to) iden-

tifying initiatives that could help the NOPD while imposing modest or no additional costs on the city. For example, NOPD salaries are not competitive with those in comparable cities. Therefore, lead author Bernard Rostker stressed in the study the need for the city to follow through on promises for pay increases as officers advance through the junior ranks.

A cost-neutral option officials might consider is reducing what is an extremely generous retirement plan and using the savings to provide an increase in more-immediate compensation. Another option is to offer housing as a noncash payment to officers if they are willing to commit to some number of years of service.

Rostker identified some major impediments to career progression throughout the department: Promotion exams are offered infrequently (with as many as five years elapsing between examinations), and there are only a limited num-

ber of slots for those who pass the exams. He suggested offering the exams more often and convening promotion boards every 12 to 18 months to pass only enough officers each cycle to fill the available vacancies. These initiatives can simultaneously help improve the quality of those promoted, raise morale, and increase retention.

The NOPD can also make its recruiting effort more proactive and ensure that all uniformed personnel are assigned to duties that they, as opposed to civilians, are uniquely qualified to perform. The study also suggested that the city begin to rebuild the police infrastructure damaged by the storm.

New Orleans Mayor Ray Nagin and RAND released the study to the public at a news conference at City Hall in New Orleans on March 30, 2007. During the news conference, Nagin noted that the city had already acted upon several of the RAND recommendations—most notably, increasing the pay of junior officers and moving (with the New Orleans Civil Service Commission) to increase the frequency of the promotion examinations.

The study drew on decades of RAND work for large governmental organizations and, more recently, for several municipal police departments to help improve the management of their personnel systems. The study also relied on interviews with officers and civilians throughout the NOPD. ■

For more information: *Recruitment and Retention: Lessons for the New Orleans Police Department*, ISBN 978-0-8330-4142-5, 2007.

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### Some low-cost initiatives can address the recruiting and retention problems.

*An unidentified New Orleans police officer shakes hands with revelers as law enforcement personnel signal the end of Mardi Gras on early Ash Wednesday, February 21, 2007.*



AP IMAGES/STEVE KASHISHIAN

## Is There Racial Bias in the Cincinnati Police Department?

Although black and white Cincinnati residents have very different experiences with the police, there is little evidence that this is attributable to racially biased policing, according to second-year findings of a five-year RAND evaluation of efforts to improve police-community relations in the city.

One fact that may contribute to the perception of bias is that more black residents than white residents live in the high-crime Cincinnati neighborhoods where the police engage in more “proactive” policing, the study concluded. The perception is reinforced by the experiences of residents pulled over by police.

Researchers analyzed 325 videos of traffic stops and found a couple of key differences in how people of different races were treated. First, black drivers were more likely to experience proactive policing, including more questions about drugs or weapons and longer stops that were significantly more likely to involve searches. Second, several of these differences were more pronounced when the officer was white.

For example, when white officers were involved in stops of black drivers, the officers were twice as likely as black officers to check passengers for identification. White officers were also more likely than black officers to stop black drivers for technical reasons, such as a broken taillight. Likewise, the stops of black drivers by white officers were likely to last longer.

But although black citizens experienced a more intensive police presence than did whites overall,

no systematic pattern of racial bias remained once the researchers had compared the stops of black and white drivers *from the same neighborhoods at the same times of day and with other matched situational characteristics*. This caveat is crucial, according to researchers.

The figure compares the percentage of stops that lasted less than 10 minutes for black drivers and for white drivers in 2005. The difference is very large when situational factors are *not* equivalent, with a far lower percentage of black drivers experiencing shorter stops. But when black and white drivers are matched by situational factors, the difference almost disappears.

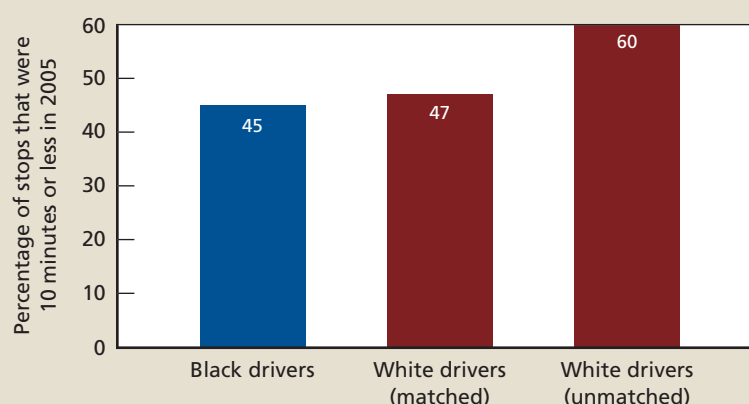
“This suggests that some differences in black and white citizens’ experiences may result from proactive policing in higher-crime neighborhoods, rather than from racial biases,” said RAND statistician Greg Ridgeway, lead author of the study.

**“Some differences in black and white citizens’ experiences may result from proactive policing in higher-crime neighborhoods.”**

The study recommends areas for improvement. For instance, the resource allocation and crime control policies of the Cincinnati Police Department disproportionately affect blacks, placing a greater burden on law-abiding residents who live in the areas subject to intensive enforcement. “The burden may be partly alleviated by developing a clear sense of what the community values in crime reduction and then tailoring the interventions,” noted Ridgeway. ■

For more information: *Police-Community Relations in Cincinnati: Year Two Evaluation Report*, 2006. As of press time (Web only): [www.rand.org/pubs/technical\\_reports/TR445/](http://www.rand.org/pubs/technical_reports/TR445/)

**When Black and White Drivers Are Matched by Such Situational Factors as Neighborhoods and Times of Day, Racial Differences Virtually Disappear**



SOURCE: *Police-Community Relations in Cincinnati*, 2006.

## Many California Hospitals Will Not Meet Seismic Safety Deadline

When an earthquake strikes, some people will need to go to a hospital. But what if hospitals themselves are victims of the quake? According to a new RAND study for the California HealthCare Foundation, almost half of California's most vulnerable hospitals are likely not to meet seismic safety standards by a 2013 state deadline.

Following the 1994 Northridge earthquake, the California legislature passed Senate Bill (SB) 1953, which put hospitals on a firm schedule for meeting seismic safety goals. The legislature anticipated that hospitals would meet the goals in two phases, with the most vulnerable buildings—those subject to collapse—at least being retrofitted by 2013 and then being fully reconstructed by 2030.

But an analysis of state data shows that nearly half of the most vulnerable buildings will not meet the 2013 deadline based on current trends, and some of those buildings likely will not meet the 2030 deadline, either. As the figure shows, the

most vulnerable California hospitals contain 52.4 million square feet that need to be rebuilt, and just over 30 million are targeted to *begin* the retrofitting or reconstruction process by 2013. Considering that there is commonly a five-year time lag between initiation and completion of these jobs, the analysts predict that only about half of the 52.4 million square feet will be retrofitted or reconstructed by the 2013 deadline.

The figure understates the extent of the problem, because it does not account for the additional, less vulnerable buildings that also need to be rebuilt by 2030. Adding those buildings to the total indicates that more than 60 million square feet of hospitals will need to be reconstructed across the state. Based on the total amount of infrastructure needing to be rebuilt and the current pace of construction, it might take more than 30 years, or at least until 2037, for SB 1953 to be fully implemented, according to the study.

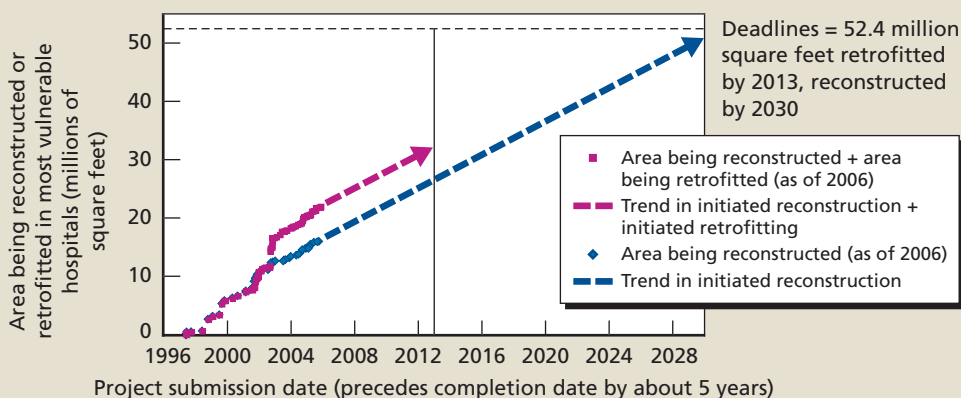
Numerous challenges make it difficult for hospitals to comply with SB 1953. New hospitals are very costly to build (about \$1,000 per square foot, or more than three times that of a new office building). Finding money to pay for such projects is a tall order (an estimated \$110 billion would be required to meet the state deadlines). And many hospitals lack staff with the skills needed to oversee such complex construction projects.

The study says that policymakers face tough choices: push ahead with the implementation of SB 1953, perhaps creating massive compliance issues; modify or eliminate the law's requirements so that most facilities can comply, raising fairness issues for those who have already complied and leaving the issue of seismic vulnerability largely unaddressed; or provide public financing for hospitals unable or unwilling to comply, again raising fairness issues.

"Seismic safety is an important policy issue for public debate," says Charles Meade, a RAND senior physical scientist and the study's lead author. "There are important public safety benefits from enhanced seismic mitigation, but the costs of new hospital construction will ultimately be borne by California patients, employers, and taxpayers." ■

For more information: *SB1953 and the Challenge of Hospital Seismic Safety in California*, California HealthCare Foundation, 2007. As of press time (Web only): [www.chcf.org/documents/hospitals/SB1953Report.pdf](http://www.chcf.org/documents/hospitals/SB1953Report.pdf)

**Many of California's Most Vulnerable Hospitals Will Not Meet a 2013 Deadline for Retrofitting, and Some Won't Meet a 2030 Deadline for Reconstruction, Either**



SOURCE: SB1953 and the Challenge of Hospital Seismic Safety in California, 2007.

## How Your Neighborhood Is Designed May Affect How Much You Walk

Some features of the “built environment” that are promoted by New Urbanism, an urban design movement, encourage people to walk, but other features do not, according to a RAND study published in the April issue of the *American Journal of Preventive Medicine*.

The study tests four design principles laid out by New Urbanism in its “smart scorecard,” which is intended to make walking a routine activity: the level of housing density, the amount of business diversity, the degree to which streets are connected on a grid system, and the shortness of block length. Increasing the housing density, business diversity, and percentage of four-way intersections and decreasing the block lengths are expected to lead to a higher prevalence of walking.

The researchers used survey information from ten metropolitan areas and U.S. Census data to determine whether these four measures of the built environment—along with two others (increased parking pressure and older median housing age)—actually do increase walking.

The table shows the results, broken out by comparisons of consecutive, paired categories within each measure. Increases in two of the measures—shorter blocks and parking pressure—generally did *not*

have the expected effect of raising the likelihood of walking. Across the comparisons in these measurements, the only statistically significant comparison that did favor walking was the highest degree of parking pressure.

Consecutive increases in the other four measures—housing density, business diversity, percentage of four-way intersections, and housing age—*did* generally follow the expected direction. However, only a few of those comparisons (such as neighborhoods with 50–74 percent four-way intersections versus those with 25–49 percent four-way intersections) showed an effect that was statistically significant.

“Our study is helping to create evidence-based guidelines for designing the built environment to make it more conducive to walking,” said lead author and RAND natural scientist Rob Boer.

He argues that “while there are some impacts, they are not that strong. We need to examine whether these New Urbanism design principles must be implemented in concert to have a big impact on walking. We also must explore other factors, such as whether people who are interested in walking may seek out certain types of neighborhoods.” ■

### Only a Few Comparisons Show a Statistically Significant Increase in the Likelihood of Walking

#### DOES WALKING BECOME MORE LIKELY?

##### Housing Density (units per acre)

4–7 units vs. 0–4	Yes
7–11 units vs. 4–7	Yes
11–14 units vs. 7–11	No
> 14 units vs. 11–14	Yes

##### Number of Businesses in a Neighborhood

1 business vs. 0	Yes
2 businesses vs. 1	No
3 businesses vs. 2	Yes
4 businesses vs. 3	Yes
5 businesses vs. 4	Yes
≥ 6 businesses vs. 5	No

##### Percentage of Four-Way Intersections

25–49 percent vs. < 25	Yes
50–74 percent vs. 25–49	Yes
75–99.9 percent vs. 50–74	Yes
100 percent vs. 75–99.9	No

##### Average Length of Long Side of Block (feet)

1,400–2,100 vs. > 2,100 feet	No
1,000–1,400 vs. 1,400–2,100 feet	No
800–1,000 vs. 1,000–1,400 feet	No
600–800 vs. 800–1,000 feet	Yes
< 600 vs. 600–800 feet	No

##### Parking Pressure (people per 10 feet of curb)

0.8–1.4 people/10 sq. ft. vs. 0–0.8	No
1.4–2.2 people/10 sq. ft. vs. 0.8–1.4	No
2.2–3.6 people/10 sq. ft. vs. 1.4–2.2	No
3.6–6.0 people/10 sq. ft. vs. 2.2–3.6	No
> 6.0 people/10 sq. ft. vs. 3.6–6.0	Yes

##### Median Housing Age (median year built)

1970–1979 vs. 1980–2000	No
1960–1969 vs. 1970–1979	Yes
1950–1959 vs. 1960–1969	Yes
1940–1949 vs. 1950–1959	Yes
Pre-1940 vs. 1940–1949	Yes

SOURCE: “Neighborhood Design and Walking Trips in Ten U.S. Metropolitan Areas,” *American Journal of Preventive Medicine*, Vol. 32, No. 4, April 2007, Rob Boer, Yuhui Zheng, Adrian Overton, Gregory K. Ridgeway, Deborah A. Cohen.

NOTE: Green cells indicate statistically significant effects.

**“We need to examine whether these New Urbanism design principles must be implemented in concert to have a big impact on walking.”**



## Terrorism Risk in Shopping Malls Can Be Reduced by Ranking Security Options

Although there are numerous options for reducing the risks of terrorism, it is unclear how to set priorities among the options because of the uncertain risks and the uncertain effectiveness and costs of various security measures. A RAND report presents an approach for tackling this problem, using case studies of three different enclosed shopping centers in the United States.

The report ranked 39 security measures for such centers based on the relative risks of different attack scenarios and on the cost and effectiveness of each measure, with the goal of achieving the greatest risk reduction for the least cost. Lead author Tom LaTourrette and his colleagues identified a high-priority set of six to ten security measures that would cut terrorism risk to just one-fifteenth the level it would otherwise be.

The researchers found that implementing these high-priority measures would be 95 percent as effective as implementing all 39

measures. The combined costs of the high-priority measures range from \$500,000 to \$2 million a year for each of the three centers examined.

The analysis does not assess the probability of terrorist attacks at U.S. shopping centers and does not suggest that the risk is high or increasing. Millions of people shop safely at shopping centers every day, but there were warnings of such attacks in two U.S. cities in 2004 and a foiled plot in 2006. Since 1998, more than 60 terrorist attacks have occurred at shopping centers in 21 countries (see the figure).

Although the three U.S. centers studied have very different sizes and layouts, the security priorities are very similar. The highest-priority measures include creating public information campaigns that encourage people to report suspicious packages, placing vehicle barriers at pedestrian entrances to block suicide car bombers, searching kiosks for bombs and weapons, labeling exits more clearly so shop-

pers can quickly find their way out of malls in an emergency, and checking for explosives and weapons by searching all bags and requiring everyone entering shopping centers to remove their coats. Identifying and reporting suspicious packages are the highest-priority security measures because terrorism risk is dominated by bomb attacks.

While shopping center operators could immediately implement some of the measures identified in this report, many of them may not be feasible or appropriate under current conditions.

“A tiered implementation may be the best strategy, implementing a set of security options most appropriate for today’s environment and developing plans today for further measures in case the environment changes for the worse,” said LaTourrette. ■

For more information: *Reducing Terrorism Risk at Shopping Centers: An Analysis of Potential Security Options*, ISBN 978-0-8330-4040-4, 2006.





## Nation-Building Efforts Should Draw Lessons from Earlier Operations

Despite a wealth of recent and prior experience, U.S.-led nation-building efforts in Iraq and Afghanistan have been marked by unforeseen challenges and hastily improvised responses. A RAND study provides a comprehensive, step-by-step guide that can help governments better prepare for future nation-building challenges of these kinds.

Drawing on the best practices identified in 24 cases of postconflict stabilization and reconstruction, the study ranks the most important tasks in this order of priority: establishing security, providing humanitarian relief, establishing functioning government institutions, stabilizing the economy, democratization, and economic development.

“The primary objective of nation-building is to make a violent society peaceful,” noted James Dobbins, the study’s lead author. “Security, food, shelter, and basic services should be provided first, allowing economic and political objectives to be pursued once these first-order needs are being met. In the absence of adequate security, money spent on democratization and development is likely to be wasted and could even produce negative results, fueling the conflict rather than promoting durable reform.”

The study says policymakers should take advantage of the “golden hour” in nation-building: the weeks following the arrival of foreign troops, when resistance is unorganized and spoilers are unsure of their future. In this period, authorities must control enough personnel and material resources to secure and supply at least the capital.

The study says the costs of nation-building depend on the size of the population affected, its level of urbanization, its income, and the level of conflict. Costs also depend heavily on whether all parties collaborate with a peacekeeping force or must be compelled to do so, in which case the mission becomes one of peace enforcement.

The table estimates annual costs of light peacekeeping, versus heavy peace enforcement, in a small and very poor country, like Haiti or Liberia. Costs are broken down by the elements of nation-building listed above, with the costs for the military, police, and rule of law all

contributing to the top priority of “establishing security.” The total annual cost comes to \$1.5 billion for peacekeeping and almost \$16 billion for peace enforcement.

Full-scale peace enforcement missions are generally feasible only in relatively small societies about which the intervening authorities care deeply, according to the study. In other cases, effective intervention likely has to wait until the parties to the conflict are ready to collaborate with an external force. ■

For more information: *The Beginner’s Guide to Nation-Building*, ISBN 978-0-8330-3988-0, 2007.

### A Heavy Peace Enforcement Operation Costs Around Ten Times More Than a Light Peacekeeping Operation

Sector	Number of Personnel		Annual Cost (millions of U.S. dollars)
	Local	International	
Light peacekeeping			
Military		8,000	\$360
	15,000		50
Police		1,000	170
	11,000		18
Rule of law			18
Humanitarian			170
Governance			260
Economic stabilization			30
Democratization			50
Development and infrastructure			390
Total, light peacekeeping	26,000	9,000	\$1,520
Heavy peace enforcement (additional requirements)			
Military		57,000	\$12,640
Police		7,000	1,080
Development and infrastructure			360
Total, heavy peace enforcement	26,000	73,000	\$15,600

SOURCE: *The Beginner’s Guide to Nation-Building*, 2007.

NOTES: Estimated annual costs are for a hypothetical country of five million people with a per-capita gross domestic product of \$500. “Light peacekeeping” assumes that the warring parties have invited the international force. “Heavy peace enforcement” assumes that force, or the threat of force, will be needed to effectuate entry. Total costs do not sum because of rounding.

# Common Grounds

## Cultivating the Field of Community-Based Participatory Research

AS THE WORLD CONFRONTS massive environmental problems such as global warming, it's easy to forget that many environmental issues reside in our own backyards. According to the latest data, well over ten million Americans live within a mile of a federal Superfund site—an uncontrolled or abandoned place where hazardous waste is located—that threatens their health and that of their children.

Figuring out the health effects of such sites is the purview of research, but spurring policymakers to take action often goes beyond the mandate of researchers. In these cases, it is often left to the communities themselves to advocate for change. Thus has arisen the field of community-based participatory research, or CBPR, involving partnerships between researchers and the communities affected by health problems, with the ultimate goal of effecting policy change and making tangible improvements in people's lives.

*A chemical plant is the backdrop for a swing set in Houston, Texas.*



AP IMAGES/PAT SULLIVAN

**Those living in communities plagued by health concerns are often frustrated with researchers because of an apparent disconnection between academia and the real world.**

Do these collaborations work? Meredith Minkler, a professor of health and social behavior at the University of California, Berkeley, School of Public Health, sought to answer that question in a talk at RAND, sharing some CBPR success stories and challenges. Minkler has more than 25 years of experience working with underserved communities in this still-emerging field.

### Beyond the Ivory Tower

Those living in communities plagued by health concerns are often frustrated with researchers because of an apparent disconnection between academia and the real world when it comes to analyzing a problem and actually working to solve it, stressed Minkler. In such cases, the field of CBPR can help to bridge the gap.

But for a project to qualify as CBPR, she argued, “The research question must come from, or be important to, the community, and there must be an interplay between the professional and the community’s ways of knowing.” She outlined five examples that fit these criteria. Each one involves environmental justice, ranging from air pollution and asthma in Harlem, New York, to children’s lead exposure in rural Oklahoma to water and air pollution from massive industrial hog operations in North Carolina.

Minkler pointed to West Harlem Environment Action (WE ACT) as a textbook case in community-driven research. With an estimated one in four kids in Harlem now suffering from asthma, WE ACT had been convinced for years that the high prevalence was related to the fact that six of New York’s eight diesel bus depots, one-third of the city’s 4,200 buses, and 650 Port Authority buses were stationed in their Northern Manhattan community.

WE ACT sought the scientific evidence by working with the Columbia Center for Children’s Environmental Health. “Kids were trained in how to use and calibrate backpack air monitors,” said Minkler, “and they also did traffic and pedestrian counts at key intersections for five eight-hour days.” The research, showing fine particulate matter rates at more than 200 times the Environmental Protection Agency threshold,

was instrumental in spurring the Metropolitan Transit Authority to convert its entire fleet to “clean diesel” and the state legislature to adopt a New York State Environmental Justice Policy.

## Barefoot Epidemiology

“Industrialized hog operations are big business in North Carolina,” said Minkler. “But they come at the expense of local rural communities, with massive runoff from the operations forming in open cesspools and contaminating well water.”

Noticing an increased incidence of chronic conditions such as sore throats and asthma, residents of the small town of Tilley, North Carolina, formed the Concerned Citizens of Tilley and began conducting what Minkler called “barefoot epidemiology.” On their own, they studied the dates of well construction, the depth of wells, and their proximity to the hog operations.

The residents formed a partnership with researchers from the University of North Carolina to help do the hard science. This research involved both water sampling to measure contamination levels and spatial analysis mapping so that citizens could document whether and to what extent there was racial discrimination in where the large hog operations were located.

“Citizens used the findings of the research in advocacy, working through the mass media and in public hearings,” said Minkler. The partnership was widely credited with helping make the county in which Tilley resides the first in the state to have a public health permitting process for hog operations as well as a moratorium on both the construction of new operations and the expansion of existing ones.

## Administering Good CBPR

In looking across all five examples, Minkler cited a number of factors for success in CBPR partnerships, including a commitment to rigorous scientific inquiry, an aptitude for building collaborations and alliances with diverse stakeholders beyond the formal partnership, and a willingness to do the “homework.” Homework includes understanding what other communities have done, who holds the decisionmaking authority, and what the key leverage points are for changing policy.

Just as important, success requires that research partners show real respect for lay knowledge. Minkler described a situation in which researchers wanted to put air monitors on school roofs but were convinced by the community to put them near the windows where



AP IMAGES/NEWS & OBSERVER, JIM BOUNDS

*A hole the size of a semitruck is shored up after the berm of a hog waste storage lagoon collapsed in Onslow County, North Carolina, sending millions of gallons of wastewater into fields and streams.*

the children were. “From a scientific point of view, it made no difference where the monitors were, but from a policy point of view, putting them near the kids was critical for advocacy,” Minkler said. “Seeing the monitors so close to the kids who were being affected made it easier for policymakers to appreciate the connection,” she explained.

There are challenges and tensions that go hand in hand with CBPR. “There is an inevitable balancing act between the necessary skepticism of science and the action-imperative of the community,” said Minkler. Researchers want to get the “science right,” which can mean waiting until the research is published, while community partners want to use the research immediately to effect change in their communities.

Even when researchers themselves want to push ahead with policy change, she said, they are often confounded by the constraints of research funding. The need to obtain future funding can deter researchers from speaking openly about policy implications, and the discussion of such implications is sometimes restricted by the editorial review boards of professional journals.

Yet academics involved in CBPR must “take seriously one’s commitments to the community,” Minkler said. “And that includes helping to ensure that action to address the study findings is part of the CBPR process itself—not simply something left for others to worry about after the papers get published.” ■

# Missing Link

## Connection Found Between Government Health Insurance and Better Child Health

By Michael Seid

*Michael Seid, formerly a RAND behavioral and social scientist, is now a professor of pediatrics in the Divisions of Pulmonary Medicine and Clinical Effectiveness and the director of health outcomes and quality of care research in the Division of Pulmonary Medicine at Cincinnati Children's Hospital and Medical Center.*

**C**reated in 1997 and slated for reauthorization this summer, the State Children's Health Insurance Program (SCHIP) is the largest expansion of spending for children's health care in the United States since the creation of Medicaid in 1965. Funded jointly by the states and the federal government

and managed by all 50 state governments, SCHIP is designed for families who earn too much money to qualify for Medicaid but cannot afford private insurance.

Studies have shown that SCHIP has increased children's *realized access to care* (or receipt of needed care). Until now, though, little evidence has existed to link the increase in realized access to

care with improved health outcomes. Our study, funded by a grant from The David and Lucille Packard Foundation, bridges the gap, finding a statistically significant correlation between realized access to care and clinically meaningful improvements in the health-related quality of life among children enrolled

in a large version of SCHIP, specifically California's program, known as Healthy Families.

Our study confirms that children in the Healthy Families program had less forgone care and fewer problems obtaining care than they had experienced prior to enrollment in this government-sponsored health insurance program. Moreover, the improvements in receiving care translated into significantly better health-related quality of life for the children. Enrollment in the program also reduced preenrollment disparities among racial, ethnic, and linguistic groups in the use of needed health care services.

The U.S. Congress will soon decide whether to reauthorize or to expand SCHIP. Given the evidence from California, which we believe is applicable nationwide, federal policymakers should consider the proven salutary effect of realized access to care. The solid evidence linking realized access to care with better health outcomes among children should propel federal policymakers to expand such access to more children.

### Better Bills of Health

The term *health-related quality of life* refers to those aspects of life directly related to physical, mental, and social well-being. Given the subjective nature of health-related quality of life, it is best measured from the perspective of an individual. When assessing the health of children, though, it is equally important to incorporate the perspective of parents, because both parent and child report vital information about overall health.

To assess the children's health-related quality of life, we used the Pediatric Quality of Life Inventory™ (PedsQL™), a widely used 23-item survey encompassing physical, social, emotional, and school factors

**Federal policymakers should consider the proven salutary effect of realized access to care.**



and using a 100-point scale. Higher scores indicate higher quality of life. Typical questions on the survey ask, “how much of a problem” is it for the child to “walk more than one block” or “keep up with school-work?” Answers range from “never” to “sometimes” to “almost always.”

From 2001 to 2003, the State of California surveyed the families enrolled in the Healthy Families program at three separate times: upon enrollment and then at one and two years afterward. Almost 5,000 families were enrolled at all three points in time, and more than 70 percent of them—nearly 3,500 families—responded to the survey all three years. Sicker children were not more likely to drop out of the program, nor was child health related to survey participation. The survey was conducted in English, Spanish, Vietnamese, Korean, and Chinese.

The state survey measured trends in realized access by asking parents to report, from year to year, if they faced any problems obtaining needed care for the children or if there were times when needed care could not be obtained at all. We hypothesized that both experiences, either problems obtaining care or forgone care, would be related to lower health-related quality of life among children, after controlling for factors such as race, ethnicity, parental language, chronic health conditions, baseline receipt of needed care, baseline health-related quality of life, and whether the children had regular physicians.

We first verified the higher realized access to care. For the sample overall, the proportion of families reporting forgone care decreased from enrollment to year one and then again from year one to year two. At enrollment, 16 percent of families reported forgone care; by year two, just 7 percent did so (see the Centerpiece on pages 16 and 17). Likewise, the proportion of families reporting problems obtaining care decreased from the baseline to year one. (The proportion of families reporting problems obtaining care held steady from year one to year two.)

By year two, the baseline disparities of forgone care among racial, ethnic, and linguistic groups were also substantially reduced. At enrollment, 17 percent of African American parents, 16 percent of Latino and Asian parents, and 13 percent of white parents said their children had forgone needed care during the previous year. By the end of year two, just 8 percent of Latino parents, 7 percent of African American and Asian parents, and 6 percent of white parents reported



AP IMAGES/RICH PEDRONCELLI

*Norma Arroyo walks with her children near their home in Vallejo, California. Although her husband's job provides health insurance for the couple, it does not cover their children. Like many working Californians, they depend on the state's Healthy Families program to cover the children.*

forgone care. Among the linguistic groups, the initial variation of 9 percentage points had shrunk to 4 points. By year two, Spanish speakers reported the most forgone care (8 percent) and Chinese speakers the least (4 percent).

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**By year two, the baseline disparities of forgone care among racial, ethnic, and linguistic groups were substantially reduced.**

*Craig Bedford, of Baltimore, Maryland, left, accompanied by his son Timothy, testifies before a Senate Finance Committee hearing on the future of the State Children's Health Insurance Program in Washington, D.C., on February 1, 2007.*



AP IMAGES/EVAN VUCCI

With respect to problems obtaining care, the rates decreased for African Americans and Latinos and for English speakers and Spanish speakers. With the exceptions of Asians and Pacific Islanders and Asian-language speakers, there was a substantial elimination over time of the disparities across groups in having problems obtaining care.

Our statistical analysis then confirmed the hypothesized link between higher realized access to care and better health outcomes. Children who received needed health care services reported quality-of-life improvements, such as doing better in school, feeling better physically, and getting along better with peers.

The statistical analysis allowed us to derive the number of points that each detrimental factor would independently “deduct from” a child’s quality of life, as scored on the 100-point scale. We found statistically significant evidence that forgone care in the previous 12 months would reduce a child’s health-related quality of life by 3.5 points according to the parent

surveys and 3.2 points according to the child surveys. Problems obtaining care in the previous 12 months would reduce a child’s quality of life by an additional

4.5 points according to the parent surveys and 4.4 points according to the child surveys.

These numbers are clinically meaningful. Judging by the parent reports, experiencing both forgone care and problems obtaining care correspond with an 8-point drop in the quality-of-life scores. (Previous research on the PedsQL™ has shown that a change of 4.5 points is a clinically important difference.) Moreover, this 8-point drop was greater than the change in scores associated with having a chronic health condition (a 6.2-point reduction). To put the numbers in further clinical perspective, the parent-reported scores for children with forgone care at both year one and year two were similar to scores for newly diagnosed pediatric cancer patients undergoing treatment.

For children whose parents had reported forgone care before enrollment, obtaining needed care led to significant increases in the average quality-of-life scores: from 75 at baseline to 79 after the first year and 78 after the second. By contrast, children who had forgone care at baseline and continued to do so during both successive years saw ever-declining scores: from 75 at baseline to 72 after the first year and 67 after the second.

Based on both parent proxy-report and child self-report, families who had reported forgone care before enrolling in the Healthy Families program scored higher with improved access. Families with access

**Continued access to care is associated with continued health. Forgone care over time is associated with declining health.**

to needed care prior to enrollment maintained their scores with realized access to care after enrollment. Persistently poor access was associated, in a cumulative manner, with a declining quality of life.

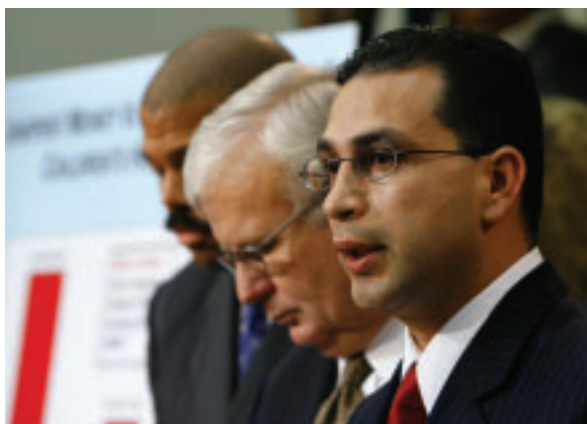
## Better Bills in Congress

The key contribution of our study is demonstrating the link between realized access to care and children's health-related quality of life, even after adjusting for child and family characteristics, the care of a regular doctor, and baseline health-related quality of life. Continued access to care is associated with continued health. Forgone care over time is associated with declining health.

Our study has three major implications for health policy. First, SCHIP and similar programs could help reduce health disparities, given the much greater likelihood that poor and minority children will experience unmet needs for care in the absence of such programs. In California, a consortium of child health experts, advocacy groups, and legislators has launched a campaign, called Californians for Healthy Kids, to promote legislation that would ensure health insurance for all children across the state. The campaign builds on existing county health insurance programs modeled on SCHIP but aims to broaden the eligibility criteria to expand access statewide. Our study provides empirical support for this policy direction, suggesting that enrollees in comparable programs experience fewer instances of unmet need, with concomitant health improvements.

Second, despite the heartening decrease in forgone care, our data show that 7 percent of the Healthy Families enrollees still experienced forgone care in their second year of enrollment. Other factors besides lack of health insurance might be at play here: parents having to take time off work, transportation barriers, negative expectations of the health care system, or poor knowledge of health care. Because forgone care is associated with such large decrements in health-related quality of life, more attention should be paid to policies and interventions aimed at overcoming the obstacles to needed care, even among the insured.

Third, although our study concerned SCHIP in California, we believe that the lessons are generally applicable to other states. The improvements in health-related quality of life among children in California came about by raising the rates of realized access to care, and that is the common, underlying purpose



AP IMAGES/HARRY CABLUCK

*Texas Representative Abel Herrero (D-Robstown), right, speaks in Austin, Texas, on January 24, 2007. A group of Texas House Democrats, including Representative Borris Miles (D-Houston), left, and Representative Joe Heflin (D-Crosbyton), center, filed legislation to restore health coverage through the state's Children's Health Insurance Program.*

of SCHIP in all states. To the extent that the variations of SCHIP succeed in improving realized access to care, the relation to health-related quality of life should hold constant.

These programs reduce forgone care. They reduce problems in obtaining care. They reduce disparities in care. And, as we now know, they increase health-related quality of life. Policymakers faced with deciding whether to reauthorize or to expand SCHIP should consider the proven effects of their decisions on the lives of children. ■

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"Enrolling Vulnerable, Uninsured but Eligible Children in Public Health Insurance: Association with Health Status and Primary Care Access," *Pediatrics*, Vol. 117, No. 4, April 2006, pp. e751–e759, Gregory D. Stevens, Michael Seid, Neal Halfon.

"The Impact of Realized Access to Care on Health-Related Quality of Life: A Two-Year Prospective Cohort Study of Children in the California State Children's Health Insurance Program," *The Journal of Pediatrics*, Vol. 149, No. 3, September 2006, pp. 354–361, Michael Seid, James W. Varni, Lesley Cummings, Matthias Schonlau.

"Parents' Perceptions of Pediatric Primary Care Quality: Effects of Race/Ethnicity, Language, and Access," *Health Services Research*, Vol. 38, No. 4, August 2003, pp. 1009–1031, Michael Seid, Gregory D. Stevens, James W. Varni.

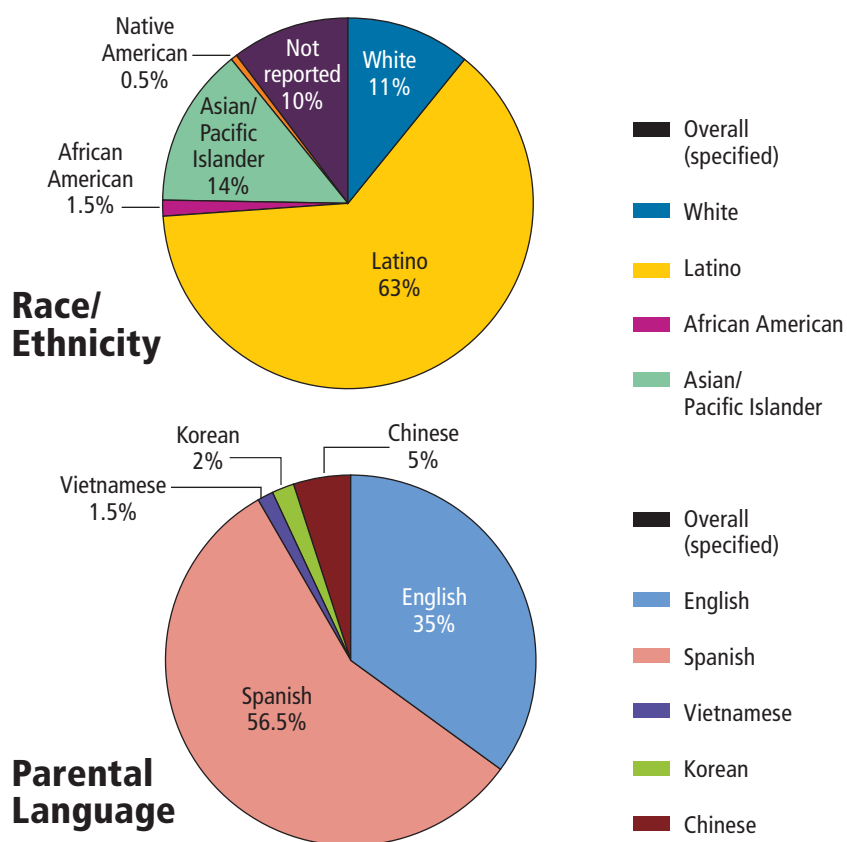
"Uninsurance Among Children Eligible for the State Children's Health Insurance Program: Results from a National Survey," *Managed Care Interface*, Vol. 19, No. 5, May 2006, pp. 31–39, Hao Yu, Michael Seid.



# State Children's Health Insurance Program Cuts

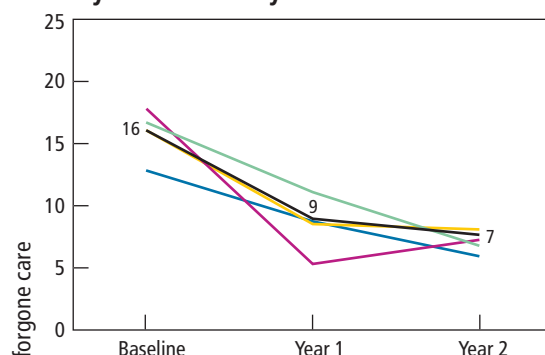
Nearly 3,500 low-income California families monitored their children's health-related quality of life upon enrollment in the State Children's Health Insurance Program and for two years thereafter. The families were racially, ethnically, and linguistically diverse.

Fewer families from all racial, ethnic, and linguistic groups reported forgone care a year after enrollment than before they enrolled. Nearly all groups reported continued reductions in forgone care as of year two. Demographic disparities in reporting forgone care

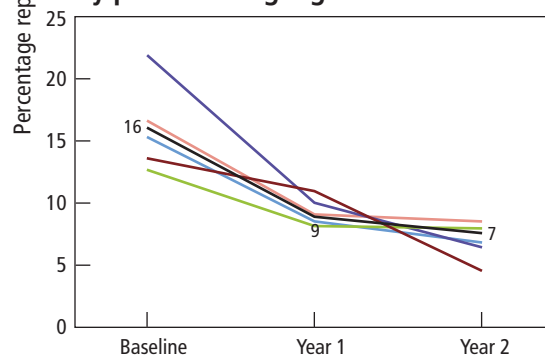


## Forgone Care Cut in Half

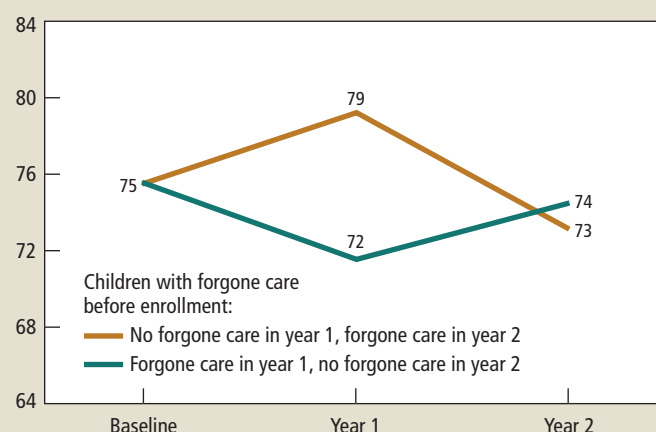
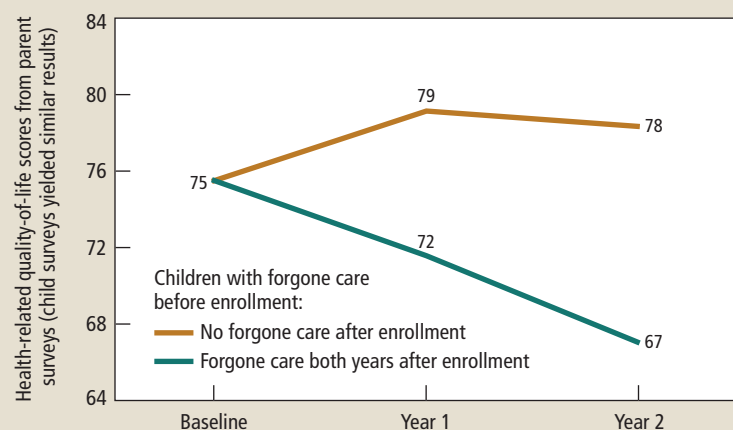
### By race/ethnicity



### By parental language



**Regardless of the amount of care received or forgone prior to enrollment, each en... maintaining their quality-of-life scores on a 100-point scale), whereas each ensuin...**



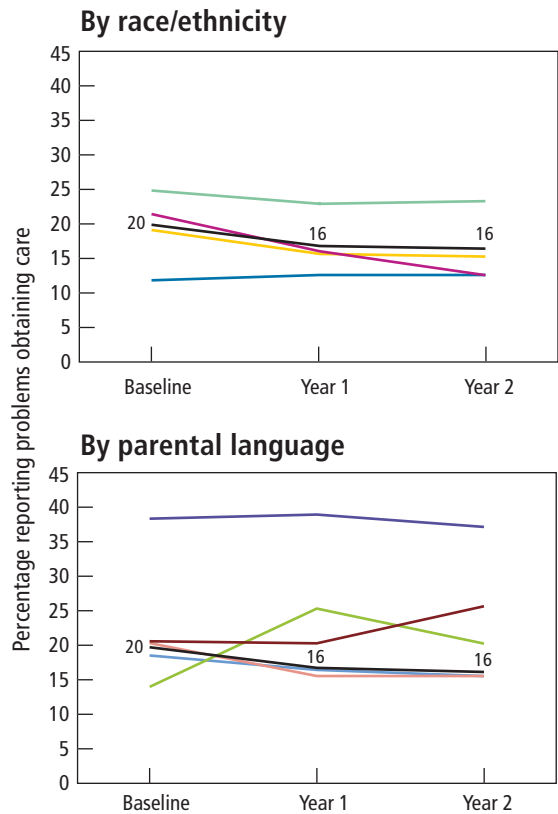
SOURCE: "The Impact of Realized Access to Care on Health-Related Quality of Life: A Two-Year Prospective Cohort Study of Children in the California State Children's Health Insurance Program"



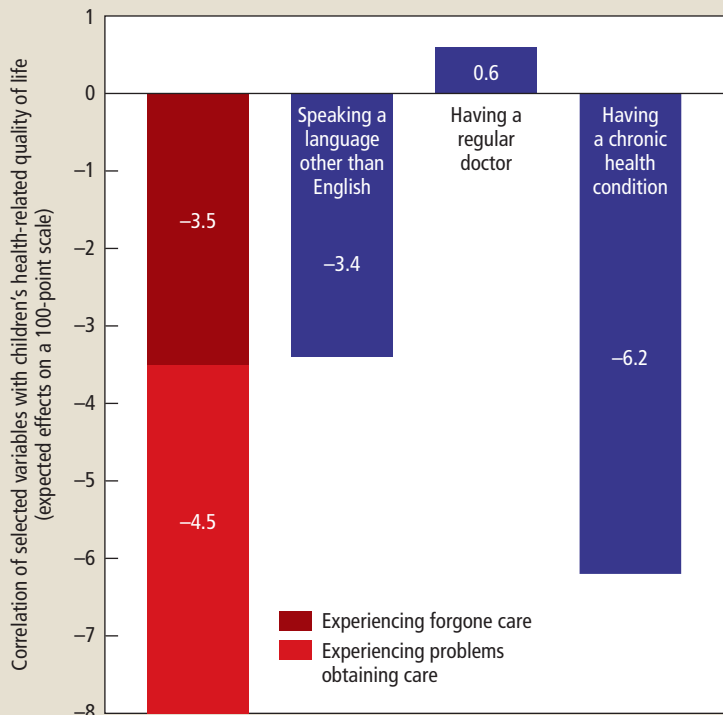
# Rate of Forgone Care, Increases Quality of Life

shrunk substantially by year two. Fewer families reported problems obtaining care as of year one. The disparities had also shrunk among families who reported such problems, except for Asians and Asian-language speakers, who reported continued problems.

## Problems Obtaining Care Reduced

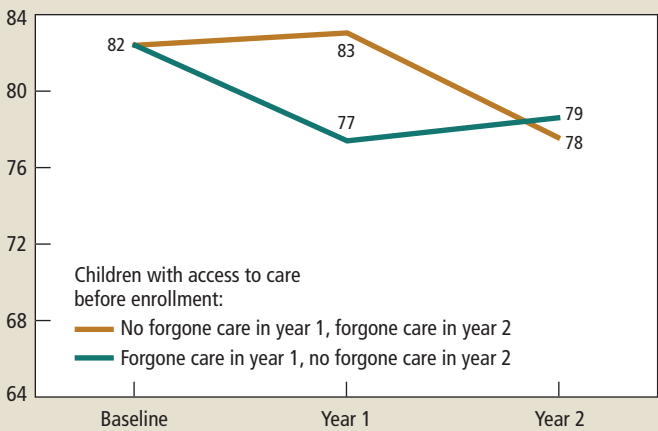
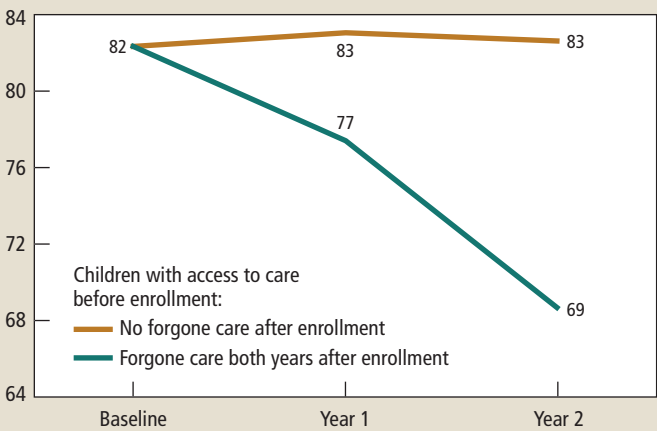


Experiencing both forgone care and problems obtaining care corresponded with a sharp decline in health-related quality of life for children: an average 8-point drop on a 100-point scale. The clinical effect was worse for a child than having a chronic health condition.



NOTES: Statistical correlations are derived from parent responses to the Pediatric Quality of Life Inventory™, a survey tool that produces health-related quality-of-life scores from 0 to 100, with 100 being best. Numbers in the chart indicate the expected change associated with each variable, either raising or lowering a child's score. Child responses to the survey yielded similar results.

## Missing year of realized access to needed care helped children (raising or roughly g year of forgone care hurt (lowering their scores).



# Keeping the Pacific

## An American Response to China's Growing Military Might

**By Roger Cliff, Evan Medeiros, and Keith Crane**

*Roger Cliff and Evan Medeiros are RAND political scientists. Cliff specializes in China's military strategy, China's science and technology, and U.S. defense policy in the Asia-Pacific region. Medeiros focuses on China's national security policy, its military and defense industrial affairs, and U.S.-China relations. Keith Crane is a RAND economist who focuses on defense and international economics.*

If the U.S. military does not continue to upgrade its technological capabilities, China could challenge the United States for military dominance in East Asia by 2020. As of today, China's military and rapidly advancing defense industries are focused on finding ways to defeat the United States in the event of a conflict between the two countries, the most likely one being over Taiwan.

**China's defense industries have been producing an increasing number of modern weapon systems.**

To enhance America's military posture in the Pacific, U.S. defense leaders should consider not merely the technological capabilities that China is developing but also the specific strategies by which it might use those capabilities against the United States. RAND's analysis suggests several ways to increase the ability of U.S. forces in the Pacific to deter and, if necessary, to defeat a Chinese attack against Taiwan.

### **China's Military Modernization**

Since the late 1990s, China's defense industries have been producing an increasing number of modern

weapon systems. Although many fall short of the most advanced systems now entering the U.S. inventory, some Chinese weapons of today are comparable to the U.S. weapons fielded in the 1970s and 1980s and that still make up the bulk of the U.S. inventory. To retain its qualitative military advantage over China, therefore, America will need to continue to develop and field systems that are significantly more advanced than the types that China is now in the process of developing and fielding.

China's defense industry has benefited from the rapidly increasing technological capabilities in China's broader economy. China's integration into the global economy has resulted in steady improvements in the research, development, production, and management of many of China's state-owned defense industrial enterprises.

Similarly, the improvement and the growing exposure to Western teaching and scientific methods of China's universities and technical schools mean that they are turning out increasingly well-trained and independent-thinking scientists, engineers, and technicians. As salaries and working conditions in China's defense industries improve, they are able to attract higher-quality university and technical school graduates, employees of high-tech civilian enterprises, and Chinese nationals who have studied or worked abroad.

Perhaps the most significant change in China's defense industries in recent years has been the dramatic increase in resources flowing to them. Between 2000 and 2005, the amount spent on weapons procurement by the People's Liberation Army more than doubled.

The net effect of these changes has been a qualitative improvement in the output of China's defense industries. They are now producing certain systems that, while not cutting edge, are comparable to many



AP IMAGES/U.S. NAVY, ALLEN LEONESIO

systems now in the inventories of the United States and other advanced militaries.

China's Type 98 tank, for example, is comparable in capability to the main battle tanks of other Western countries, although so far the Type 98 tank has been produced in only small quantities. China has launched two classes of naval destroyers that are expected to have air defense capabilities comparable to those of U.S. cruisers and destroyers equipped with the Aegis air defense system. China is currently producing two classes of modern diesel-electric submarines and is building two new classes of nuclear submarines that are far better than their predecessors. The C-802 antiship missile carried by China's naval combatants is comparable in capability to early versions of the Harpoon missile that is still used on U.S. naval combatants.

Since the 1990s, the Shenyang Aircraft Corporation has been coproducing, with Russian assistance, the Su-27 fighter jet, which is roughly comparable to the U.S. F-15. An indigenously built fighter jet, the J-10 is comparable to the U.S. F-16 and has reached initial operational capability. China's PL-9 air-to-air missile is comparable to the U.S. AIM-9M Sidewinder that was in production until 2004, and China is developing a radar-guided missile, the SD-10, that is

expected to match up to the U.S. AIM-120 advanced medium-range air-to-air missile. Other systems under development in China include an airborne early warning and control aircraft comparable to the U.S. Airborne Warning and Control System, a surface-to-air missile system expected to be comparable to early versions of the U.S. Patriot, a cruise missile expected to be comparable to the U.S. Tomahawk, and a high-speed antiradiation missile. China has also purchased several weapon systems from Russia that are highly advanced and, in some cases, exceed U.S. capabilities.

China's military is well known for its short-range, conventionally armed ballistic missiles. They provide a unique capability for China and one that is extremely difficult to counter. Carried on road-mobile launchers, they are exceedingly hard to locate and to attack before they are launched. In addition, the latest models are believed to have accuracies of 50 meters or less. China is also reported to be developing a ballistic missile capable of hitting a moving ship at sea. If this latter effort were

*The U.S. Naval Base Guam, in Apra Harbor, could become home to an aircraft carrier, closer to potential flash points in Asia.*

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**Between 2000 and 2005, the amount spent on weapons procurement by the People's Liberation Army more than doubled.**

successful—a big “if”—it would give China a unique and unprecedented military capability.

However, a number of shortcomings remain. China has yet to develop a dedicated attack helicopter. Its antisubmarine warfare technology is weak. It appears to be nowhere close to fielding any kind of stealth aircraft. It does not have a super-agile, infrared-guided, air-to-air missile like those of the United States, Russia, and Israel. And it has nothing like the range of precision air-to-ground munitions employed

by U.S. air forces. Moreover, narrowing the technological gap will be costly; prior to 2025, China is unlikely to have resources available for defense comparable to those currently available to the United States (see Figure 1).

Nonetheless, the strategic significance of the advances in China’s defense industries could be huge.

As long as the products of U.S. defense industries continue to advance, it is unlikely that China’s defense industries will produce systems that directly challenge U.S. technological dominance. Conversely, if the U.S. military does *not* continue to upgrade its technological capabilities, it is possible that by the end of the next decade, China *will* be able to field a military capable of challenging U.S. dominance in East Asia.

If China focuses on developing its capabilities for military operations near the coast of East Asia and avoids investing in expensive long-range power

projection assets—such as aircraft carriers, heavy bombers, and long-range transports—then, by 2020, China could have the resources to field modern military forces that, while not numerically equal to those fielded by the United States, would at least be of comparable magnitude. Furthermore, China will have the advantage that its home territory is located within the region, whereas East Asia is nearly halfway around the globe from the United States. Whether the United States will retain its military advantage over China, therefore, depends both on China’s actions and on whether the United States will replace its current weapon systems with new ones that are qualitatively superior. America currently possesses substantial military and technological advantages over the Chinese military, and these must be retained while China devotes greater resources to military modernization.

## China’s Military Strategy

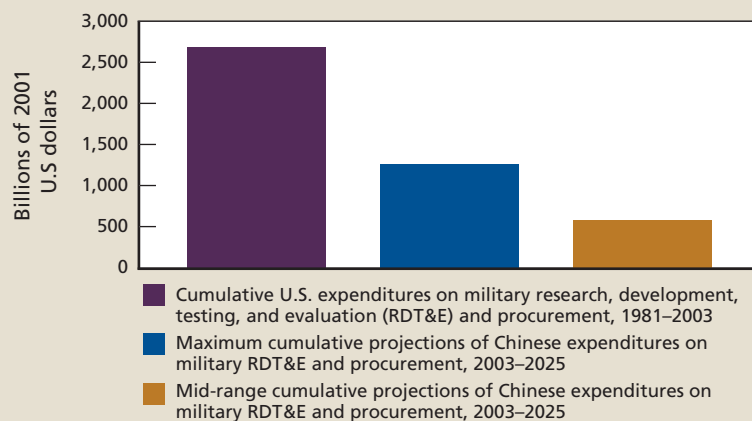
America needs to retain a strategic as well as a technological advantage. Chinese military doctrinal writings discuss how to defeat a militarily superior adversary such as the United States. We found these writings in openly published Chinese-language books on military strategy, articles in Chinese military journals, reports from Chinese military newspapers, and recent Western studies of Chinese security policy. We found in the writings at least seven strategic principles that have implications for U.S. forces in the Pacific.

The first strategic principle is seizing the initiative early in a conflict. Chinese military analysts note that Iraq, by not seizing the initiative in the 1991 Gulf War, allowed the United States to build up its forces until it had overwhelming superiority. If China is to be victorious against a militarily superior power, China must go on the offensive from the very beginning. In the context of a conflict between the United States and China, this means that U.S. forces stationed permanently in the Western Pacific will be critical, because China is likely to go on the offensive before additional forces can be brought into the theater.

A second and related strategic principle for defeating a militarily superior adversary is the importance of surprise. Surprise is valuable not only for an immediate tactical advantage but also as an important way of seizing the initiative. Surprise puts the adversary in the position of reacting to China’s moves, making it easy to maintain the initiative thereafter. In the context of a conflict between the United States and China, this

## The strategic significance of the advances in China’s defense industries could be huge.

**Figure 1—Projected Chinese Military Expenditures over 22 Years Are Much Less Than Actual U.S. Military Expenditures over the Previous 22 Years**



SOURCE: *Modernizing China’s Military*, 2005.



means that the ability of U.S. forces in the Pacific to avoid and survive surprise attacks will be critical.

Related to the first two strategic principles is a third one: the value of preemption. If China waits for a militarily superior adversary to commence hostilities, it will be difficult for China to seize the initiative, and the adversary will likely wield the preponderance of forces. If, by contrast, China initiates a conflict, China can seize the initiative and may also enjoy an initial advantage in the local balance of forces. Preemption also greatly increases the chances of successfully achieving surprise. In the context of a conflict between the United States and China over Taiwan, this means that China might initiate hostilities by preemptively attacking U.S. forces in the region, even before China has attacked Taiwan, on the presumption that the United States will inevitably intervene in a conflict with Taiwan.

A fourth strategic principle is raising the costs of conflict. At least some Chinese military analysts believe that the United States is sensitive to casualties and economic costs and that the sudden destruction of a significant portion of our forces would result in a severe psychological shock and a loss of will to continue the conflict. When this principle is combined with the preceding two, it suggests a belief that a preemptive surprise attack on U.S. forces in the Pacific could cause the United States to avoid further combat with China. Although the last time such a strategy was attempted in the Pacific the ultimate results were not favorable for the country that attacked, the Chinese military doctrinal writings that we examined did not acknowledge such historical counterexamples.

A fifth strategic principle is that of limited strategic aims. A militarily inferior country cannot expect to achieve total victory over a militarily superior adversary. But if its aims are limited, the inferior country could create a situation in which the costs to its adversary of reversing the results of an initial offensive exceed the benefits of such a reversal, and therefore the adversary will choose to live with the results. In the context of a conflict between the United States and China, this principle suggests that if China's leadership believes it can quickly accomplish its military aims and present the United States with a fait accompli (such as the invasion and occupation of Taiwan) without threatening any truly vital U.S. interests, then China might embark on such a conflict even if its leadership recognizes that the United States could ultimately prevail if it desired.

The sixth and seventh strategic principles are avoiding direct confrontation and conducting "key point strikes," or concentrated attacks. China knows that it cannot win in direct, force-on-force combat with the United States. However, all militaries rely on certain critical functions, any one of which, if disrupted, will render a military unable to operate effectively. Chinese doctrine identifies five such targets: command systems, information systems, weapon systems, logistics systems, and the linkages between the systems. In the context of a conflict between the United States and China, this means that the United States must be prepared for attacks that are focused less on its main combat forces than on key support systems.

Perhaps no U.S. military vulnerability is as important, in Chinese eyes, as its heavy reliance on its information network, which includes command, control, communications, computer, intelligence, surveillance, and reconnaissance systems. Chinese strategists believe that the U.S. military's awesome power derives in large degree from its effective integration and use of information technology. Successfully attacking that system will affect U.S. combat capabilities much more profoundly than would directly targeting combat platforms. Chinese strategists also believe that the U.S. military information network is not just vulnerable but also fragile. Thus, the foundation of the U.S. military's success can also be its undoing.

### **Proposed U.S. Counterstrategy**

Based on the weapons being fielded by China's military and on the vulnerability of U.S. assets to the types of attacks described in China's military doctrine, we offer six recommendations for mitigating the potential effects of such attacks.

Our first recommendation is to strengthen passive defenses at U.S. air bases and aviation fuel storage facilities in the Western Pacific. The ability of China's ballistic missiles to disrupt flight operations at air bases would be reduced by strengthening runways (for example, by adding a layer of concrete to them) and increasing rapid

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**Perhaps no U.S. military vulnerability is as important, in Chinese eyes, as its heavy reliance on its information network.**

runway repair capabilities. The ability of the missiles to destroy aircraft on the ground would be reduced by constructing hardened aircraft shelters, because aircraft are most vulnerable when they are parked in the open. Constructing underground fuel tanks would similarly reduce the vulnerability of fuel supplies.

Our second recommendation is to deploy air defense systems with antiballistic missile capabilities, both on land and at sea, near all air bases and other facilities in the Western Pacific that the United States would use in the event of a conflict with China (see Figure 2). By themselves, ballistic missiles are capable of damaging only runways and “soft” targets, such as unsheltered aircraft and aboveground fuel tanks. But China is also developing cruise missiles and acquiring aircraft with precision-guided munitions, which are capable of destroying “hard” targets, including aircraft shelters and buried fuel tanks. To the extent to which air defense systems are capable of intercepting ballistic missiles and preventing the shutdown of runway operations, U.S. fighter aircraft stationed at those

bases would be able to defend them from cruise missile and aircraft attacks. And even if land- or sea-based air defense systems were unsuccessful at defeating ballistic missile attacks, they would also be capable of defending the bases against follow-on attacks by cruise missiles and manned aircraft.

Our third recommendation, designed to undermine Chinese special operations forces and covert operatives, is to extend the coordination that now exists between U.S. and local forces in Korea to U.S. facilities in Japan and Guam. Chinese military doctrinal writings recommend using special operations forces and covert operatives to attack key strike points at air bases and other facilities. Because such attacks would generally originate from areas outside of U.S. military bases, the local security forces will be critical lines of defense, as will be the coordination between local forces and U.S. base forces. Given the ongoing threat from North Korean special operations forces, these defenses have long been in place at U.S. facilities in Korea, but now they should exist at U.S. facilities in

**Figure 2—Light Blue Area of Ocean Shows Portions of the Western Pacific That Are Most Vulnerable to China’s Missile, Aircraft, Covert Operative, and Computer Network Attacks**



SOURCE: *Entering the Dragon's Lair*, 2007.

Japan and Guam as well. The bases can further reduce their vulnerability to covert operatives by installing antismoke systems, fortifying perimeter security, and shielding key areas from outside view.

Our fourth recommendation is to establish more U.S. air bases in the region or, alternatively, to operate land-based aircraft from a broader range of existing locations. Increasing the number of airfields that China would have to neutralize and thus reducing the amount of Chinese firepower that could be devoted to each target would decrease the possibility that one or two Chinese attacks could significantly disrupt U.S. military operations in the region.

Our fifth recommendation is to consider deploying an additional U.S. aircraft carrier in the region. Currently, the United States keeps one aircraft carrier full time in the Western Pacific. Given the many threats to land-based aircraft, having an additional aircraft carrier on the scene could become extremely valuable. The closest additional carriers (other than those that might be transiting through the region) are now based on the U.S. west coast. Because a conflict with China could begin with little warning, as much as two weeks could elapse before an additional aircraft carrier would reach the area of combat operations. An aircraft carrier based in Hawaii would still take at least a week to reach the waters near Taiwan. An aircraft carrier departing from Singapore, by contrast, could arrive in three days, and one departing from Guam could arrive in about two days.

Our sixth recommendation is to reduce the vulnerability of the U.S. information network. Many of the above proposals for defending against attacks on critical facilities will also reduce the vulnerability of information networks to physical attack. But given the interest that Chinese military writers have shown in this topic, it seems likely that, in the event of a conflict with the United States, China will devote significant resources to computer network attacks and related information operations. The effectiveness of such efforts will depend largely on exploiting poor U.S. information-security practices. Conversely, the potential damage from Chinese information operations can be reduced significantly by enforcing proper security practices for U.S. military information systems: eliminating known security vulnerabilities, using software encryption, isolating critical systems from publicly accessible networks, eliminating unencrypted links to secure computers, enhancing user identification measures, and monitoring network activity.

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## **Given the many threats to land-based aircraft, having an additional aircraft carrier on the scene could become extremely valuable.**

Given the possibility that China could nonetheless succeed in disrupting U.S. information systems despite these measures, the U.S. military should also maintain and exercise the ability to conduct operations without continuous, high-bandwidth communications between units. Such operations could entail using communications technologies that are out of date by modern standards or even using completely autonomous operations, without data from remote sensors or direction from higher headquarters.

These suggestions do not represent an exhaustive list of enhancements that should be made to the U.S. force posture in the Pacific. We have not performed an economic cost-benefit analysis of these options, and so we cannot definitively say that the military benefits of the recommendations made here exceed the financial costs of implementing them. We can say, however, that in light of what we know about China's current and future military capabilities and its military doctrine, the potential Chinese threat to U.S. facilities in the Western Pacific is real and growing, and there are a number of concrete actions that the United States can take to reduce the threat. ■

## **Related Reading**

*Advances Underway in China's Defense Industries*, Roger Cliff, RAND/CT-256, 2006. As of press time (Web only): [www.rand.org/pubs/testimonies/CT256/](http://www.rand.org/pubs/testimonies/CT256/)

*China's Military Modernization and the Cross-Strait Balance*, Roger Cliff, RAND/CT-247, 2005. As of press time (Web only): [www.rand.org/pubs/testimonies/CT247/](http://www.rand.org/pubs/testimonies/CT247/)

*Entering the Dragon's Lair: Chinese Antiaccess Strategies and Their Implications for the United States*, Roger Cliff, Mark Burles, Michael S. Chase, Derek Eaton, Kevin L. Pollpeter, RAND/MG-524-AF, 2007, 154 pp., ISBN 978-0-8330-3995-8, \$27.50.

*Modernizing China's Military: Opportunities and Constraints*, Keith Crane, Roger Cliff, Evan S. Medeiros, James C. Mulvenon, William H. Overholt, RAND/MG-260-1-AF, 2005, 296 pp., ISBN 0-8330-3698-X, \$30.

*A New Direction for China's Defense Industry*, Evan S. Medeiros, Roger Cliff, Keith Crane, James C. Mulvenon, RAND/MG-334-AF, 2005, 330 pp., ISBN 0-8330-3794-3, \$30.

# Takeover Overtaken

## Public Management of Philadelphia Schools Leaves Private Management Behind in Math

By Brian Gill

*Brian Gill is a RAND social scientist. His research addresses a variety of topics in K–12 education policy, such as parental choice, districtwide institutional reform, and high-stakes testing.*

Since 2002, Philadelphia has been the site of the nation's largest experiment in the state takeover and private management of public schools. As such, the city serves as a test case for some of the most aggressive interventions sanctioned by the federal No Child Left Behind Act of 2001 and offers lessons for schools and districts nationwide.

Soon after Pennsylvania took over the Philadelphia school district, the district adopted a “diverse provider” model, handing over management of 45 of its lowest-achieving schools to for-profit organizations, nonprofit organizations, and local universities. The aim was to capitalize on the know-how of the private sector to improve the performance of public schools. The district also gave the private managers extra funding per student.

Four years later, student achievement across Philadelphia has risen substantially. On average, the schools

under private management have matched but not exceeded the districtwide trends. In contrast, a set of district-managed schools that were given both additional funding and a “restructuring” intervention showed consistently and significantly larger achievement gains in math.

Philadelphia's diverse provider model is of national importance for several reasons. First, the district outsourced the core functions of public schools: the design and delivery of education programs. Second, the scale of private management—45 schools—is far larger than in any other district in the nation to date. Third, Philadelphia offers a preview of what could happen in other low-achieving schools across the country in response to the accountability directives of the No Child Left Behind Act, which is the most ambitious federal incursion into primary and secondary education in the nation's history.

The No Child Left Behind Act requires states to create high-stakes testing systems that trigger steadily stronger interventions in chronically low-achieving schools and districts. Three of the strongest interventions advised by the law are state takeover, school restructuring, and private management. Few schools and districts have yet reached this phase, but many soon will. In Philadelphia, the state imposed the interventions well in advance of the federal requirement, giving an early demonstration of its potential effects.

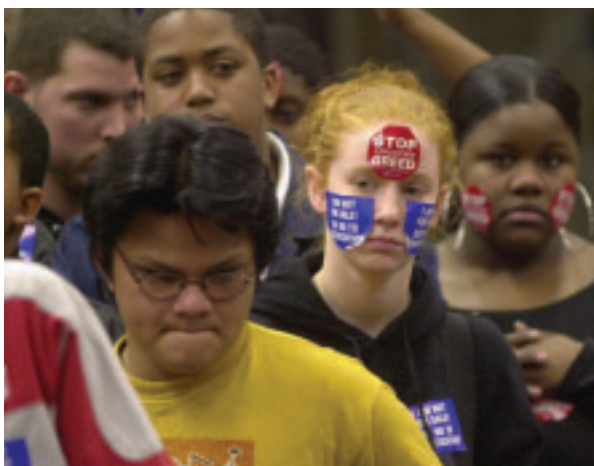
The Philadelphia model diverged from theoretical models of competition in important ways. There was little competition among providers, no parental choice of schools, and continued district involvement in the privately managed schools. Thus, this case should not be viewed as a definitive test of private management under competitive conditions.

### Diverse Providers, Similar Results

Fed up with years of low achievement and budget crises in the Philadelphia schools, Pennsylvania seized control of the district in 2002 and replaced its school

**The aim was to capitalize on the know-how of the private sector.**





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*Far left:  
Wearing stickers  
of protest against  
privatization,  
Philadelphia  
student Lucy  
Buchanan Parker  
(middle) joins  
others at a  
Philadelphia  
school commission  
meeting.*

*Left:  
Paul Vallas,  
chief executive  
officer for the  
School District  
of Philadelphia,  
instituted sweep-  
ing districtwide  
changes beyond  
privatization.*

board with an appointed School Reform Commission. The commission hired Paul Vallas, former chief executive officer of the Chicago public schools, to take the helm in Philadelphia.

Vallas instituted sweeping changes. He modernized efforts in hiring and retraining qualified teachers, launched an ambitious program of school construction and renovation, pushed vigorously for an upgraded curriculum, and balanced the budget. He mandated frequent assessments, a zero-tolerance discipline policy, assistance for low-performing schools, extended-day and summer school for poorly performing students, and the dismantling of middle schools in favor of K–8 schools. These districtwide initiatives applied equally to all schools, including those operated by private providers. The most controversial change of all was the diverse provider model: turning over management of 45 of the district’s elementary and middle schools to seven private managers.

The diverse provider model also included 21 low-achieving schools that were “restructured,” or given extra funding per student and intensive professional development for principals and leadership teams, while remaining under district management. (Restructuring in Philadelphia contrasts with the restructuring envisioned by No Child Left Behind. The latter anticipates “significant changes in the school’s staffing and governance” that might involve replacing principles and teachers, converting the school to a charter school, or allowing a private manager to take over.)

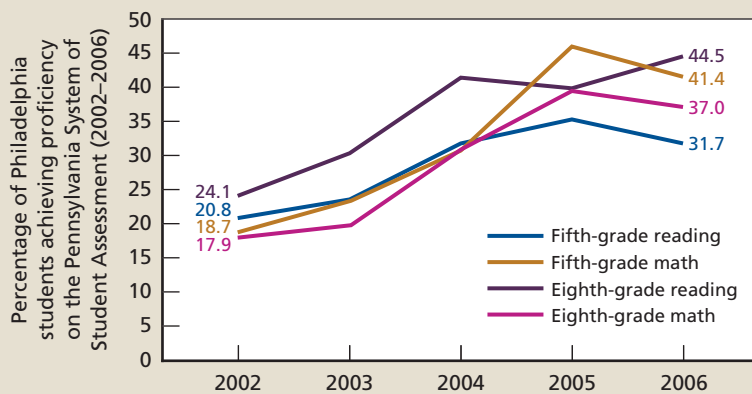
As a baseline for comparison, our RAND team looked at the districtwide achievement trends through spring 2006. The proportion of elementary and middle-

school students achieving proficiency in reading and math increased substantially throughout Philadelphia since the 2002 state takeover. From the 2001–2002 school year to the 2005–2006 school year, an additional 11 percent and 23 percent of fifth graders reached proficiency in reading and math, respectively. Likewise, an additional 20 percent and 19 percent of eighth-graders reached proficiency in reading and math, respectively (see Figure 1). Philadelphia’s achievement gains were in most cases approximately equivalent to the gains of similarly low-achieving schools elsewhere in the state.

We then compared the trends in the privately managed and restructured schools with the trends of other Philadelphia students. Our major findings are as follows:

- *Privately managed schools:* There were no statistically significant effects, positive or negative, in reading or math in any of the four years after takeover.
- *Restructured schools:* There were *significantly positive* effects in math in all three years of imple-

**Figure 1—Student Proficiency Increased Throughout the School District of Philadelphia from 2002 to 2006**



SOURCE: *State Takeover, School Restructuring, Private Management, and Student Achievement in Philadelphia*, 2007.

mentation and in reading in the first year. In the fourth year, after the additional resources for these schools had ceased, they maintained a substantially positive effect in math (although the effect was just marginally statistically significant).

In short, after four years of intervention, the achievement gains in Philadelphia's privately managed schools were, on average, no different from Philadelphia's districtwide gains. However, the restructured schools remaining under district management outgained the rest of the district in math in all three years of restructuring, with evidence of the gain persisting a year afterward.

We found no statistically significant effects, positive or negative, among the three types of private providers: for-profits, nonprofits, or universities. We found few statistically significant differences among individual providers. And we found no clear indications of notable differences in effects on particular at-risk subgroups of students, such as special education students or those with limited English skills.

Figure 2 portrays the most salient empirical findings in a way that only a statistician could love. As shown in the figure, the only achievement gains that were statistically significant in comparison with the districtwide gains occurred in the restructured schools. At those schools, the gains in math in all three years of implementation and in reading in the first year were statistically significant at a level of 95-percent

confidence. In the fourth year, after the restructuring ended, the enduring gains in math were statistically significant at a level of just 90-percent confidence. The results for each year represent the cumulative effects of each treatment from the start of the intervention through that year.

All results are shown in terms of what are known as "z-scores," which are admittedly incomprehensible to just about anyone who is not a statistician. Rather than comparing raw numerical gains in test scores, educational statisticians convert everything to z-scores so that all results from varied interventions across time and place can be put on a single scale. In this case, the "effect sizes" for each intervention are calculated as fractions of a standard deviation from the districtwide norm. The key insight here is that the effect sizes for math at the restructured schools, ranging from 0.16 to 0.22 standard deviations, are considered moderate to large, relative to those seen in other educational interventions.

## Where Credit Is Due

Different interpretations of the results may lead to different judgments about whether Philadelphia's experiment in the private management of public schools has succeeded and whether it should be continued. On the negative side of the ledger, privately operated schools did not produce average increases in student achievement that were any larger than those in the rest of the district. Meanwhile, the district-managed restructured schools outpaced the rest of the district in math.

Still, it is impossible to know definitively how well the privately managed schools would have performed had they remained under conventional district management or been restructured. Whether the district could have replicated the gains of the restructured schools in three times as many schools—not just 21 but an additional 45—is unclear. The private managers were given some of the lowest-achieving schools in the district. They improved alongside the rest of the district at a time when achievement levels districtwide were increasing substantially. We cannot rule out the possibility that the assistance from private providers was an important part of the total reform effort in Philadelphia.

On the other hand, we found little reason to believe that competition from private providers spurred the districtwide improvement. We found no evidence to support the view that adding private managers increased the districtwide capacity for improvement or that the privately managed schools would have fared

worse otherwise. If they had remained under district management, it seems likely that the district could have replicated the gains of the other schools that received no special treatment, obtaining results similar to those actually achieved by the private managers.

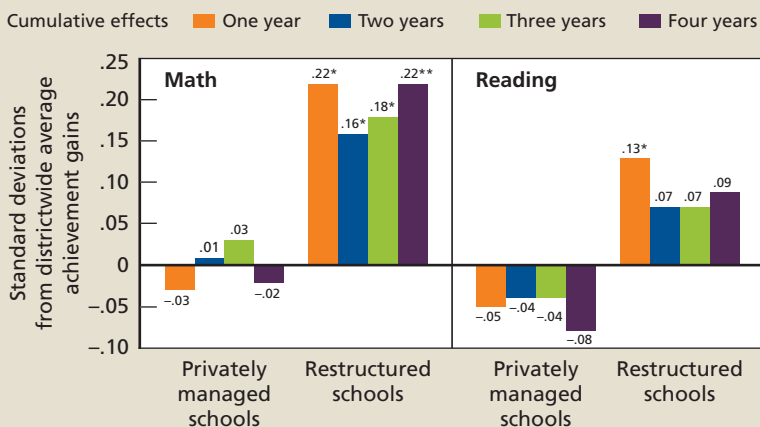
Advocates of privatization might contend that our focus on the relative gains of different groups of schools within the district obscures the larger story of citywide gains, and that those citywide gains are attributable to competitive pressure induced by the introduction of private managers. If healthy competition caused all schools in the district to improve, it is possible that the comparison of schools within Philadelphia underestimates the true benefit of introducing private managers.

There is no way to definitively address this hypothesis. First of all, Vallas and the School Reform Commission introduced so many districtwide reform efforts that it is impossible to know which of them were primarily responsible for the districtwide gains. Secondly, the diverse provider model in Philadelphia was not set up in a way that would maximize competition: Private managers' freedom of action was constrained in ways that minimized differences among them, and, more important, the district did not promote parental choice among schools in a way that would allow the schools to compete for students. Moreover, other schools in Pennsylvania saw gains similar to those in Philadelphia, without introducing private management. In short, although there is no way to disprove the competition hypothesis, we do not find evidence supporting it. It appears at least as likely that other aspects of the district's initiatives were primarily responsible for the citywide achievement gains.

While the private managers' contracts are now coming up for renewal, we do not find evidence that would support providing the private managers with additional funding beyond that available to district-managed schools. Nonetheless, average results obscure considerable variation across schools and managers, and we hope that the school district carefully considers the success of each school and each provider as it considers contract renewals. Moreover, our study was limited to an examination of achievement results in reading and math. Private providers may be producing other benefits that are not captured in test results.

The larger implications of these findings for the most aggressive sanctions of No Child Left Behind are unclear. With respect to state takeover, the Phila-

**Figure 2—Under the Diverse Provider Model, the Only Gains That Were Statistically Significant in Comparison with the Districtwide Gains Occurred in the Restructured Schools**



SOURCE: *State Takeover, School Restructuring, Private Management, and Student Achievement in Philadelphia, 2007*.

\*Statistically significant at the 95-percent confidence level.

\*\*Statistically significant at the 90-percent confidence level.

delphia results are ambiguous: Subsequent to the state takeover of the district, student proficiency increased districtwide, but the total increase over four years was not substantially greater than the increase for other low-achieving schools across the state. The Philadelphia experience provides no evidence to support private management as an especially effective method of promoting student achievement—at least not under the model implemented, with constrained competition and limited provider autonomy. Whether private management involving more autonomy for managers, parental choice, and competition for students would produce better results remains an open question. ■

**The Philadelphia experience provides no evidence to support private management as an especially effective method of promoting student achievement—at least not under the model implemented.**

## Related Reading

*State Takeover, School Restructuring, Private Management, and Student Achievement in Philadelphia*, Brian Gill, Ron Zimmer, Jolley Christman, Suzanne Blanc, RAND/MG-533-ANF/WPF/SDP, 2007. As of press time (Web only): [www.rand.org/pubs/monographs/MG533/](http://www.rand.org/pubs/monographs/MG533/)

# Wouldn't It Be Lovely?

## British Policy on Antisocial Behavior Can Take Cues from Studies Near and Far

**By Jennifer Rubin and Lila Rabinovich**

*Jennifer Rubin and Lila Rabinovich are analysts at RAND Europe. Rubin is a social and political scientist. Rabinovich is a social anthropologist.*

**A**ntisocial behavior is a costly and growing concern in the United Kingdom, with Britain's Home Office logging around 66,000 reports of antisocial behavior each day. Vandalism alone is estimated to cost victims and the criminal justice system around £1.3 billion (\$2.5 billion) annually. Other commonly reported forms of antisocial behavior include intimidation, drunkenness, begging, drug dealing, prostitution, rowdiness, graffiti, littering, and dumping rubbish in public places.

The British government has responded by introducing new laws and policy initiatives. They range from Anti-Social Behaviour Orders (court orders that forbid offenders from continuing the behavior, spending time with particular people, or visiting certain areas, with each breach punishable by a fine or jail time) to cognitive behavioral programs and parent training programs. Research shows that punitive interventions, such as detention and imprisonment, tend to produce nil or even negative effects in reducing recidivism among young offenders. However, several studies from around the world have found that certain alternative interventions can significantly reduce the rate of recidivism.

Despite growing interest in nonpunitive measures, there is a paucity of data on their effectiveness and cost-effectiveness in Europe. For this reason, the United Kingdom's National Audit Office commis-

sioned RAND Europe to conduct an international review of the literature as part of a wider evaluation of policies designed to counteract antisocial behavior.

Based on the data available, the best value in reducing antisocial behavior appears to come from parent training and early childhood interventions, including prenatal support. Also showing positive results are many developmental or rehabilitative programs, such as cognitive behavioral programs, interpersonal skills training and counseling, and family-based interventions. Restorative justice programs, which bring offenders into direct contact with the consequences of their actions, merit further evaluation. Even keeping neighborhoods clean and free of litter or improving street lighting can reduce the incidence of crime and antisocial behavior.

### Cost Benefit and Beyond

Everyone agrees that antisocial behavior and crime are expensive. There are direct costs, such as property damage, that are relatively easy to quantify, as exemplified by the data suggesting that vandalism alone costs in excess of £1 billion a year in the United Kingdom. There are also wider, indirect costs to the community, victims, and local businesses that are less readily quantifiable. At the same time, U.S. data suggest that diverting just one individual from a life of antisocial behavior and crime saves society between \$1.7 million and \$2.3 million. These significant costs and potential savings highlight the importance of implementing and evaluating effective interventions. Programs reviewed by RAND economist Lynn Karoly reveal a range of cost-benefit ratios, from a benefit of just \$1.26 for every dollar spent to a return of as much as \$17.07.



But cost benefit should not be the whole story. While certain interventions may yield benefits that are difficult to quantify, the interventions might be deemed worthy of pursuing in any case. For example, a program for low-risk children could generate a “lower yield” than the same program would for high-risk children, because fewer low-risk children might ultimately end up as offenders. Targeting expenditures solely at higher-risk populations could trigger a higher cost-benefit ratio, but policymakers may nonetheless decide that it is also worth investing in low-risk children for the benefit of the few who might otherwise go on to become offenders. It is also possible that so-called “high-yield” programs might actually be more difficult or less desirable to implement because of political sensitivity, high start-up costs, or other issues.

## Restoring Civility

RAND research conducted in the United States has found that early childhood interventions and educational incentives for at-risk youth offer the best value in reducing crime and antisocial behavior. According to this research, the benefits of parent training and early interventions, including prenatal support, have been proven to persist into adulthood, producing the highest cost-benefit ratios. A range of educational incentives, such as student cash allowances and graduation payments in the United States and the United Kingdom, also appear quite cost-effective.

Several developmental interventions show promising results in reducing recidivism. A Scottish study has demonstrated initial success with cognitive behavioral programs, which view dysfunctional behavior as a product of personal and external factors and seek to address the ways in which thoughts, feelings, and behaviors are interrelated. In the United States, evaluations show that individual counseling and interpersonal skills training have reduced recidivism by about 40 percent among juvenile offenders, with the largest effects on those offenders who have committed the greatest numbers of offenses. In the United States, Canada, and Norway, similar interventions that are targeted not just at the offenders but also at their entire families have been proven to reduce future delinquency, including sibling delinquency.

Situational interventions can also reduce offenses. Designed to remove opportunities for crime and to encourage positive behavior, these measures include keeping neighborhoods clean, improving street light-



AP IMAGES/CATHAL MCNAUGHTON

ing, avoiding the simultaneous closure of pubs, substituting glasses and bottles in pubs with plastic, and making taxis more accessible after dark.

Finally, restorative justice merits further evaluation. In restorative justice programs from the Netherlands to New Zealand, offenders meet directly with crime victims and learn of the extent of property damage. This type of intervention is meant to provide an opportunity for the offender to acknowledge his or her antisocial behavior and recognize its negative impact on others. In some cases, restorative justice programs require offenders to compensate for the harm, either by repairing the damage or by engaging in community service. Apart from the possible benefits for offenders, restorative justice programs might also improve the lives of victims by giving them a sense of control and redress, thereby reducing the psychological ramifications associated with being a victim. ■

## Related Reading

*Diverting Children from a Life of Crime: Measuring Costs and Benefits*, Peter W. Greenwood, Karyn Model, C. Peter Rydell, James Chiesa, RAND/MR-699-1-UCB/RC/IF, 1998, 86 pp., ISBN 0-8330-2623-2, \$15.

*Early Childhood Interventions: Proven Results, Future Promise*, Lynn A. Karoly, M. Rebecca Kilburn, Jill S. Cannon, RAND/MG-341-PNC, 2005, 200 pp., ISBN 0-8330-3836-2, \$24.

*Interventions to Reduce Anti-Social Behaviour and Crime: A Review of Effectiveness and Costs*, Jennifer Rubin, Lila Rabinovich, Michael Hallsworth, Edward Nason, RAND/TR-448-NAO, 2006. As of press time (Web only): [www.rand.org/pubs/technical\\_reports/TR448/](http://www.rand.org/pubs/technical_reports/TR448/)

*Tackling Anti-Social Behaviour*, National Audit Office, Report by the Comptroller and Auditor General, HC 99 Session 2006–2007, December 7, 2006, 48 pp., London: The Stationery Office. As of press time: [www.nao.org.uk/publications/nao\\_reports/06-07/060799.pdf](http://www.nao.org.uk/publications/nao_reports/06-07/060799.pdf)

*Britain's Prime Minister Tony Blair unveiled plans in November 2006 for nearly 80 “supernannies” to help parents tame unruly children. In addition, Anti-Social Behaviour Orders have become the British government's main weapon against loutish behavior, such as petty crime, vandalism, and hooliganism. The orders have been used to ban thousands of people, some as young as ten, from shouting, swearing, spray painting, playing loud music, associating with certain individuals, and walking down certain streets.*

# DHS AWOL?

## Tough Questions About Homeland Security Have Gone Missing

By James A. Thomson

*James Thomson is president and chief executive officer of the RAND Corporation.*



PHOTO: DIANE BALDWIN

The RAND Corporation is an institution famous for sometimes telling its clients that they are asking the wrong questions. Today, we must go one step further. What should be one of our most important clients—the U.S. Department of Homeland Security (DHS)—isn't asking many critical policy questions at all.

Since September 11, 2001, RAND has produced a number of analyses of homeland security policies. A peculiar feature of this work is that DHS has had only a minor role in funding it. Most of the funding has come from other agencies (such as the U.S. Departments of Justice, Defense, and Health and Human Services) or from our own discretionary sources.

How come? Our experience with DHS points to deeper problems within the agency.

First, the goals and strategy of DHS remain ill-defined. DHS leaders are thus left to “manage by inbox,” with the dominant mode of DHS behavior being crisis management.

Second, DHS implements most of its programs with little or no evaluation of their performance. When performance metrics have been implemented, they have often measured inputs and outputs only—not effectiveness. We do not know, therefore, where and how much to invest in homeland security options.

Third, as demonstrated by its response to Hurricane Katrina, the agency that was supposed to enhance the coordination and integration of homeland security efforts has had limited success in doing so. One consequence is that DHS is subject to frequent reorganizations proposed by a dissatisfied U.S. Congress.

To put these problems in context, the creation of DHS was the most sweeping reorganization of the federal government since the creation of the U.S. Department of Defense (DoD) in 1947. In some ways, creating DHS was even more complex, combining 22 agencies and major programs, compared with just 3 agencies in the case of DoD. One key step in the DoD process began after about 15 years, under Secretary of Defense Robert McNamara: the consolidation of policy, program, and budget authorities in the Office of the Secretary of Defense.

Unfortunately, we can't wait 15 years. Al Qaeda and its copycats are planning to strike now. We need an efficient, indeed an agile, DHS to help protect us.

Three steps would help. First, DHS needs high-level, department-wide policy leadership charged with developing and maintaining a strategic vision. In other cabinet agencies that are assigned security responsibilities, this key leadership position is commonly called an undersecretary of policy. Such a position has not yet been established in DHS, despite several attempts to do so. For reasons I cannot fathom, both Congress and the White House stand in the way.

Second, the homeland security secretary needs an analytical arm, like McNamara's Office of Systems Analysis, to ensure that the program and budget of the department reflect its policy and strategy. McNamara's triumph, controversial at the time (especially in Congress), was to create a coherent, integrated five-year program, from which a one-year budget appropriation could be derived.

Third, both the policy office and the analytical arm need to tap into the nation's academic and analytic communities, whose members can contemplate key issues and feed their analyses back into the federal agencies. Today, DHS receives little analytical advice on issues of policy, program, and budget.

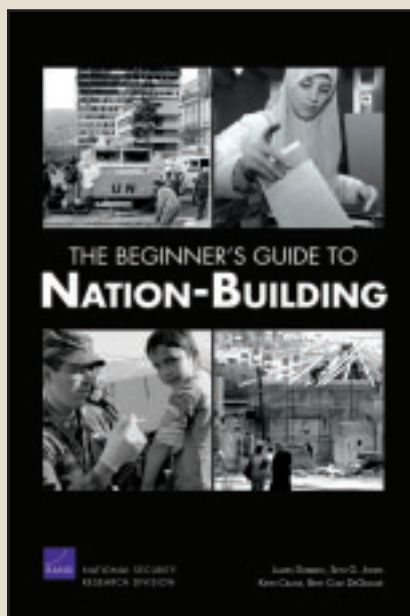
Let's face it: I'm biased. Today, I lead the institution that recommended and helped implement the DoD reforms initiated in the 1960s and that advised the Office of Systems Analysis. Like my predecessor in this job, I cut my teeth in the Office of Systems Analysis, in the 1970s in my case and the 1960s in his. But I'm convinced that these kinds of changes are needed again today so that DHS can cope with the serious threat this nation faces. ■

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**We can't wait  
15 years. Al Qaeda  
and its copycats  
are planning  
to strike now.**

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### Misfortunes of War Press and Public Reactions to Civilian Deaths in Wartime

Eric V. Larson and Bogdan Savych

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David E. Johnson

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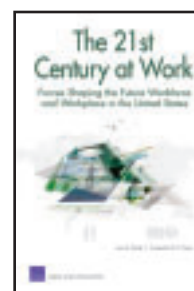
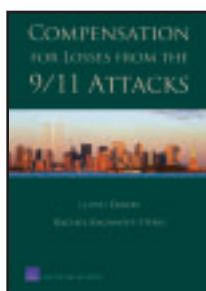


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